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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,442	03/30/2004	Lawrence J. Feroli	EMC04-03(04013)	3381

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EXAMINER	
WRIGHT, INGRID D	

ART UNIT	PAPER NUMBER
2835	

DATE MAILED: 03/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,442	FEROLI ET AL.	
	Examiner	Art Unit	
	Ingrid Wright	2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,8-13,16-18* is/are rejected.

7)☒ Claim(s) *6,7,14 and 15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *12/2/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1,2,4,8-10,12,16 & 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. US 6411526 B1 in view of Larabell et al. US 5842030.

With respect to claim 1, Nguyen et al. teaches (see, fig. 1-4) a power cord assembly for connecting to a power source (not shown), the power cord assembly having: a power cord (330) which includes a first plug (340) configured to an external power source, a second plug (not shown) configured to connect to the power source (not shown), and a cable (see, cable of 330) interconnected between the first and second plugs (340, not shown); and a device (310) configured to fasten the first plug (340) to the frame (300), the device (310) including a body (360) configured to attach to an installation location of a frame (300) and substantially hold the first plug (340) at the installation location of the frame (300), the body (360) including: a first end wall (see, first end wall of (360)), a second end wall (see, second end wall of (360)), and lateral walls (see, lateral wall of 360)) which connect the first end wall and the second end wall together; wherein, when the body (360) substantially holds the first plug (340) at the installation location of the frame (300) and when the body (360) is attached to the installation location of the frame (300), (i) the first end wall is configured to restrain the plug (340) in a positive Z-direction relative to the frame, (ii) the second end wall is configured to restrain the first plug (340) in a negative Z-direction relative to the frame (300), the negative Z-direction being opposite to the

positive Z-direction along a Z-axis, and (iii) the lateral walls are configured to register the first plug (340) relative to the frame in an X-Y plane which is perpendicular to the Z-axis.

Nguyen et al is silent as to a data storage system and operating circuitry.

Larabell et al. teaches a data storage system (10) and operating circuitry (48).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the data storage system and operating circuitry of Larabell et al., in the invention of Nguyen et al., in order to provide power for the data storage system (see, Abstract of Larabell et al.).

With respect to claim 2, Nguyen et al. teaches (see, fig. 1-4) a power cord assembly for connecting a power supply (420) to a power source, the power cord assembly comprising: a power cord (330) having a first plug (340) configured to connect to the power supply (420), a second plug (not shown) configured to connect to the power source (not shown), and a cable (330) interconnected between the first and second plugs (340, not shown); and a device (310) for fastening the first plug (340) to a frame (300), which is configured to support the power supply (420), the device (310) including a body (360) configured to attach to an installation location of the frame (300) and substantially hold the first plug (340) at the installation location of the frame (300) when the power supply (420) connects with and disconnects from the plug (340), the body (360) including: a first end wall (see, first end wall of (360)), a second end wall (see, second end wall of (360)), and lateral walls (see, lateral walls of (360)) which connect the first end wall and the second end wall together; wherein, when the body (360) substantially holds the first plug (340) at the installation location of the frame (300) and when the body (360) is attached to the installation location of the frame (300), (i) the first end wall (see, first end wall of (360)) is configured to restrain the plug (340) in a positive Z-direction relative to the frame (300), (ii) the second end wall (see, second end wall of (360)) is configured to restrain the first

plug (340) in a negative Z-direction relative to the frame (300), the negative Z-direction being opposite to the positive Z-direction along a Z-axis, and (iii) the lateral walls (see, lateral walls of (360)) are configured to register the first plug (340) relative to the frame in an X-Y plane which is perpendicular to the Z-axis.

With respect to claim 4 & 12 respectively, Nguyen et al. teaches the body (360), which further includes: a key (see, keys on first end wall shown in fig. 2A) extending from the first end wall (see, first end wall of (360)), the key being configured to (i) enable the body (360) to attach to the frame (300) at the installation location when the body (360) has a first rotational orientation along the Z-axis and inhibit the body (360) from attaching to the frame (300) at the installation location when the body (360) has a second rotational orientation along the Z-axis, the second rotational orientation being offset from the first rotational orientation by substantially 180 degrees.

With respect to claim 8 & 16 respectively, Nguyen et al. teaches the first end wall (see, first end wall of (360)), the second end wall (see, second end wall of (360)) and the lateral walls (see, lateral end wall of (360)), which are formed of a non-conductive polymer (see, col. 3, lines 60-67 of Nguyen et al.).

With respect to claim 9 & 17 respectively, Nguyen et al. teaches the first end wall (see, first end wall of (360)), the second end wall (see, second end wall of (360)) and the lateral walls (see, lateral walls of (360)), which form a contiguous, integrated, unitary member.

With respect to claim 10, Nguyen et al. teaches a device (310) for fastening a plug (340) of a power cord (330) to a frame (300) which is configured to support a power supply (420), the device (310) comprising: a body (360) configured to attach to an installation location of the frame (300) and substantially hold the plug (340) at the installation location of the frame (300) when the power supply (420) connects with and disconnects from the plug (340), the body (360) including: a first end wall (see, first end wall of (360)), a second end wall (see, second end wall of (360)), and lateral walls (see, lateral walls of (360)) which connect the first end wall and the second end wall together; wherein, when the body (360) substantially holds the plug (340) at the installation location of the frame (300) and when the body (360) is attached to the installation location of the frame (300), (i) the first end wall (see, first end wall of (360)) is configured to restrain the plug (340) in a positive Z-direction relative to the frame (300), (ii) the second end wall (see, second end wall of (360)) is configured to restrain the plug (340) in a negative Z-direction relative to the frame, the negative Z-direction being opposite to the positive Z-direction along a Z-axis, and (iii) the lateral walls (see, lateral walls of (360)) are configured to register the plug (340) relative to the frame (300) in an X-Y plane which is perpendicular to the Z-axis.

2. Claims 3,5,11 & 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. US 6411526 B1 in view of Larabell et al. US 5842030, further in view of Freeman et al. US 5366388.

With respect to claims, 3 & 11 respectively, in regards to all the limitations of claim 1 and 10 above, Nguyen et al., as modified by Larabell et al., teaches the body (360).

Nguyen et al., as modified by Larabell et al., is silent as to tabs.

Freeman et al. teaches tabs (32) extending from the lateral walls, the tabs (32) being configured to deflect toward the lateral walls and bend back away from the lateral walls when a body inserts through a hole (22c) defined by a frame to lock the body to a frame at an installation location.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the tabs of Freeman et al., in the invention of Nguyen et al., in order to secure a plug to a frame (see, col. 9, lines 10-23 of Freeman et al.).

With respect to claim 5 & 13, Nguyen et al. teaches the body (360).
Although, Nguyen et al., as modified by Larabell et al., is silent as to a first and a second member.

Freeman et al. teaches a body (see, body of coupler (16)) to allow a plug (14) to become encapsulated, with a first (see, side portion near (16)) and second member (see, side portion near (16)) of (fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize the plug and body configuration of Freeman et al., in the invention of Nguyen et al., as modified by Larabell et al., in order to provide a support and attachment means for a connector (see, Abstract of Freeman et al.).

3. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nguyen et al. US 6411526 B1 in view of Larabell et al. US 5842030.

Regarding the method claim, the method steps recited in the claims are inherently necessitated by the device structure as taught by Nguyen et al. & Larabell et al. Nguyen et al. & Larabell et al. disclosed stalling a power supply (420) into a data storage system (10), a device

(310) fastened to a plug (340) of a power cord (330); attaching the device (310) to an installation location of a frame (300) of the data storage system (10); a power supply (420) inserted into the frame (300) of the data storage system (10) until the power supply (420) mates with the plug (340) of the power cord (330), the device (310) having a first end wall (see, first end wall of (360), a second end wall (see, second end wall of (360), and lateral walls (see, lateral walls of (360)) which connect the first end wall and the second end wall together; wherein, when the device (310) substantially holds the plug (340) at the installation location of the frame (300) and when the device (310) is attached to the installation location of the fame (300), (i) the first end wall (see, first end wall of (360)) is configured to restrain the plug (340) in a positive Z-direction relative to the frame (300), (ii) the second end wall (see, second end wall of (360)) is configured to restrain the first plug (340) in a negative Z-direction relative to the frame (300), the negative Z-direction being opposite to the positive Z-direction along a Z-axis, and (iii) the lateral walls (see, lateral walls of (360)) are configured to register the first plug (340) relative to the frame (300) in an X-Y plane which is perpendicular to the Z-axis.

Allowable Subject Matter

4. Claims 6,7,14 & 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the allowability resides in the overall structure of the device as recited in claims 6,7,14 & 15, because claim 6 & 14 recites: "the first member, which defines a set of substantially 90 degree angles, and wherein the second member defines a set of angles which are substantially greater than 90 degrees to control rotational orientation of the first plug relative to the first and second member; when the first plug is encapsulated by the first and second members," and claim 7 &

15 recites: "the first and second members define a set of open spaces adjacent the first plug when the first plug is encapsulated by the first and second members."

The aforementioned limitations in combination with all remaining limitations of claims 6,7,14 & 15 are believed to render the claims and all claims dependent therefrom patentable over the art of record.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Wang US 20040066622 A1 shows the state of the art regarding computer systems with power cord and power supply configurations.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ingrid Wright whose telephone number is (571)272-8392. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached on (571)272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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